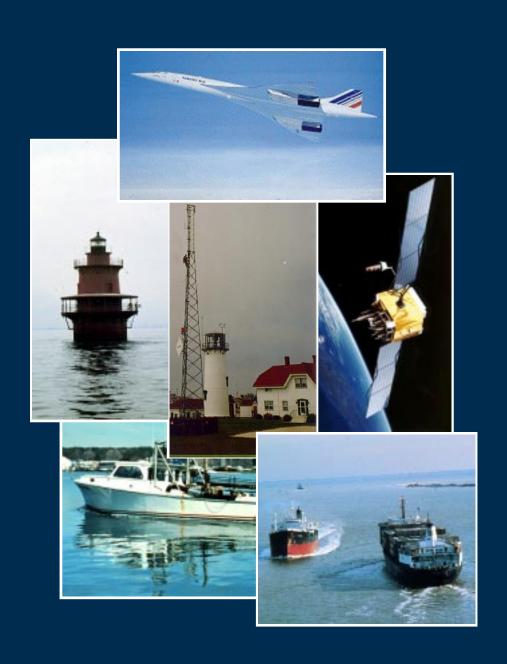
Leading the World in Navigation Excellence



U.S. Coast Guard Navigation Center



...INTO THE TWENTY-FIRST CENTURY...

Introducing the Coast Guard Navigation Center

The U.S. Coast Guard Navigation Center (NAVCEN) provides quality navigation services that promote safe transportation, support the commerce of the United States, and directly benefit worldwide international trade. As a center of navigation excellence, NAVCEN is proud to be at the forefront of United States transportation and navigation initiatives, leading the nation and the international maritime communities into the Twenty-First Century.

Radionavigation and Information Services

NAVCEN controls and manages Coast Guard radionavigation systems from two sites: Alexandria, Virginia, and Petaluma, California. NAVCEN provides worldwide users with reliable navigation signals, timely operational status, general navigation, and other information.



OMEGA Radionavigation System

As described in the 1996 Federal Radionavigation Plan, the Omega Radionavigation System ceased operations on September 30, 1997.



...APPLYING THE LATEST TECHNOLOGIES...

GPS/DGPS



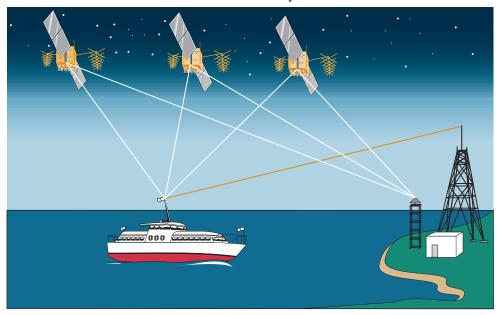
The Global Positioning System (GPS) is a satellite-based radionavigation system developed and operated by the U.S. Department of Defense (DoD). GPS permits land, sea,

and airborne users to determine their threedimensional position, velocity, and time, 24 hours a day in all weather, anywhere in the world. The civil GPS system has a predicted accuracy of better than 100 meters (a more precise positioning service is available to DoD and other qualified organizations). The U.S. Coast Guard has developed an augmentation to GPS called Differential GPS (DGPS).





NAVCEN operates the maritime DGPS service, consisting of two control centers and more than 50 remote broadcast sites. The DGPS service broadcasts correction signals on marine radiobeacon frequencies to improve the accuracy and integrity of the GPS positions. DGPS equipped receivers provide better than 10-meter accuracy, especially benefiting harbor entrance and approach navigation. Coverage areas include U.S. coastal areas, including the Great Lakes, Puerto Rico, most of Alaska, Hawaii, and the Western river system. Many nations are providing or implementing standard maritime DGPS service modeled after the Coast Guard's system to significantly enhance maritime safety in their waterways.



...TO PROVIDE QUALITY SERVICES...

Loran-C



Loran-C was originally developed to provide radionavigation service for U.S. coastal waters and was later expanded to

include complete coverage of the continental U.S. as well as most of Alaska. Twenty-four U.S. Loran-C stations work in partnership with Canadian and Russian stations to provide coverage in Canadian waters and in the Bering Sea. Loran-C provides better than 0.25 nautical mile absolute accuracy for suitably equipped users within the published areas. Users can return to previously determined positions with an accuracy of 50 meters or better using Loran-C in the time difference repeatable mode. Advances



in technology have allowed greater automation of Loran-C operations. New technology has allowed the Coast Guard to establish centralized control of the continental U.S. Loran-C system at two locations. The application of new receiver technology has improved the usability of the system. The system is expected to be a part of the radionavigation mix for the remainder of this century.

CGSIC

NAVCEN coordinates and manages the Civil GPS Service Interface Committee (CGSIC) as part of the Department of Transportation's program to respond to the needs of civil GPS users, and to integrate GPS into civil sector applications. CGSIC is the recognized worldwide forum for effective interaction between all civil GPS users and the U.S. GPS authorities.



CGSIC comprises members from U.S. and international private, government, and industry

user groups. Three subcommittees focus on specific user groups: International, Timing, and U.S. States and Localities.

CGSIC meets semiannually and is open to anyone interested in civil GPS issues. A summary record of each meeting is available from the NIS. Information from CGSIC members and meetings is provided to U.S. GPS authorities for consideration in GPS policy development and GPS service operation.



...AND PEOPLE MAKE THE DIFFERENCE.

NIS



The Coast Guard's Navigation Information Service (NIS), operated by NAVCEN, provides one-stop shopping for all radionavigation system user information needs. The NIS is



staffed 24 hours a day, 7 days a week, providing information in a wide range of media. This information includes status, policy and general information for GPS, DGPS, and Loran-C. The

NIS also disseminates Maritime Safety Broadcasts and Local Notices to Mariners (LNM), and hosts the Coast Guard's Customer Information Line.



Web site with links to:

- GPS
- DGPS
- LORAN
- CGSIC
- RNAV SPECTRUM
- Local Notice to Mariners
- General Information

- What's New
- Radionavigation Policy
- Policy Discussion Notes
- Marine Communications
- Recreational Boating Safety Information
- Links of Interest
- Contacting NAVCEN

The NIS strives to satisfy customer needs by using the latest computer and Internet technologies to gather, process, and disseminate timely information. Through the NIS Web site, users can download status, policy, and other important information related to waterways and navigation safety. The NIS collects user reports of GPS anomalies, interference to GPS, and other problems related to navigation safety. The NIS Web site also allows users to subscribe, via e-mail, to the latest Notice Advisories to NAVSTAR Users (NANU).

FOR ADDITIONAL INFORMATION:



If you would like to comment on any of the services provided by NAVCEN, or ask questions about present or future services, this is how to reach us:



Write to

Commanding Officer (NIS) U.S. Coast Guard Navigation Center 7323 Telegraph Road Alexandria, VA 22315-3998



Voice/Fax Access

Telephone: (703) 313-5900 Fax: (703) 313-5920



Internet Access

http://www.navcen.uscg.mil ftp://ftp.navcen.uscg.mil

e-mail: NISWS@smtp.navcen.uscg.mil CGSIC@smtp.navcen.uscg.mil



Fax on Demand Access

Fax: (703) 313-5931/5932



GPS Status Recording

Telephone: (703) 313-5907



WWV/WWVH Radio Broadcasts

Users can hear WWV broadcasts by telephone or radio at 14-15 minutes past the hour and WWVH at 43-44 minutes past the hour.

Radio frequencies: 2.5, 5, 10, 15, 20 MHz

Telephone: (303) 499-7111



Coast Guard Customer Infoline

Call Infoline operators for information on boating safety recalls, to report possible defects in boats, to comment on USCG boarding procedures, for answers to boating safety questions, or for boating safety literature.

Telephone: (800) 368-5647